WHAT IS CLAIMED IS:

1. A method of identifying a disease-associated lymph node in an excised tissue sample, comprising,

5
a) administrating to a subject at least one fluid composition comprising of from about 0.1% carbon particles to about 6.0% carbon particles,

b) excising at least one tissue sample suspected of comprising at least one lymph node,

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c) identifying a lymph node by the accumulation of said carbon particles, and;

d) identifying, diagnosing, staging or predicting the presence of neoplastic tissue in said lymph node.

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2. The method of claim 1, wherein the concentration of the carbon particles is between about 0.15% and about 5.0%.

3. The method of claim 1, wherein the concentration of the carbon particles is
20 between about 0.15% and about 4.0%.

4. The method of claim 1, wherein the concentration of the carbon particles is between about 0.15% and about 3.0%.

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5.   The method of claim 1, wherein the concentration of the carbon particles is between about 0.15% and about 2.0%.

6.   The method of claim 1, wherein the concentration of the carbon particles is
5   between about 0.15% and about 1.0%.

7.   The method of claim 1, wherein the concentration of the carbon particles is between about 0.2% to about 1.0%.

10   8.   The method of claim 1, wherein the concentration of the carbon particles is between about 0.3% to about 1.0%.

9.   The method of claim 1, wherein the concentration of the carbon particles is between about 0.4% to about 1.0%

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10.   The method of claim 1, wherein the concentration of the carbon particles is between about 0.5% to about 1.0%.

11.   The method of claim 1, wherein the size of the carbon particles is between about
20   0.1 and about 6.0 microns in diameter.

12.   The method of claim 11, wherein the size of the carbon particles is between about 0.2 to about 4.0 microns in diameter.

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13. The method of claim 12, wherein the size of the carbon particles is between or about 0.2 to about 2.0 microns in diameter.

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14. The method of claim 13, wherein the size of the carbon particles is between about 0.2 and about 1.0 microns in diameter.

15. The method of claim 14, wherein the size of the carbon particles is between about 0.3 to about 0.8 microns in diameter.

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16. The method of claim 1, wherein the size of the carbon particles is less than about 0.2 microns in diameter.

17. The method of claim 1, wherein the carbon particles comprise carbon black.

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18. The method of claim 17, wherein the carbon particles comprise channel black, thermal black or furnace black.

19. The method of claim 17, wherein the carbon black is neutral.

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20. The method of claim 17, wherein the carbon black is acidic.

21. The method of claim 17, wherein the carbon black is basic.

22. The method of claim 1, wherein said composition comprises a suspension of carbon particles.

5 23. The method of claim 1, wherein said composition further comprises at least one additional compound.

24. The method of claim 23, wherein the at least one additional compound is a dye.

10 25. The method of claim 24, wherein the dye is an acid dye, a basic dye or a direct dye.

26. The method of claim 25, wherein the additional dye is a direct dye.

15 27. The method of claim 26, wherein the direct dye is Paper Yellow GG (CI Direct Yellow 131), Direct Scarlet 4BS (CI 29160), Congo Red (CI 22120), Violet BB (CI 27905), Direct Sky Blue 5B (CI 24400), Pentamine, Phthalocyanine Blue (CI 74180), Black G (CI 35255) or Deep Black XA (CI Direct Black 154).

20 28. The method of claim 24, wherein the dye is an anionic dye.

29. The method of claim 24, wherein the dye is Tartrazine (CI 19140), Quinoline Yellow (CI 47005), Eosin (CI 45380), Acid Phloxine (CI 45410), Erythrosine (CI

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45430), Sunset Yellow FCF (CI 15985), Acid Violet 5B (CI 42640), Patent Blue AF (CI 42080), Brilliant Cyanine 6B (CI 42660), Acid Brilliant Blue FCF (CI 42090), Naphthalene Green VSC (CI 44025) or Acid Blue Black 10B (CI 20470).

30.   The method of claim 24, wherein the dye is isosulfan blue, guajazulen blue, patent blue V, pentamine or Direct Sky blue, or other dye which travels through the lymphatic system.

31.   The method of claim 30, wherein the dye is isosulfan blue.

32.   The method of claim 31, wherein the composition comprises about 0.1% to about 1% isosulfan blue.

33.   The method of claim 31, wherein the composition comprises carbon dye, radiolabeled sulfur colloid and isosulfan blue dye.

34.   The method of claim 24, wherein the total dye concentration of the composition is about 0.1 to about 10 mM.

35.   The method of claim 1, wherein the composition further comprises a diagnostic aid.

36.   The method of claim 35, wherein the diagnostic aid is Fluorescein or Fluorescein Sodium.

37.   The method of claim 23, wherein the at least one additional compound is a

5   radionucleotide tracer.

38.   The method of claim 37, wherein the radionucleotide tracer is technetium-labeled sulfur or albumin colloid, antimony chloride, or other colloidal radionucleotide that travels through the lymphatic system.

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39.   The method of claim 23, wherein the additional compound is a receptor binding compound, an antibody or a locator.

40.   The method of claim 1, wherein said administering is to the lymphatic region

15   surrounding a neoplastic tissue.

41.   The method of claim 40, wherein the neoplastic tissue is a melanoma, lung carcinoma, neuroblastoma, pheochromocytoma, colon, prostate, renal carcinoma, breast carcinoma, esophageal, gastric, pancreatic, oropharyngeal cancer or another neoplasm

20   that metastasizes by the lymphatic channels.

42.   The method of claim 41, wherein the neoplastic tissue is a melanoma.

43.   The method of claim 41, wherein the neoplastic tissue is a breast carcinoma.

44.   The method of claim 1, wherein the mode of administration is subcutaneous, intramuscular, intralesional, intradermal, intraperitoneal, parenteral, oral, nasal, buccal,

5   rectal, vaginal or orthotopic.

45.   The method of claim 1, wherein the time between administering and detecting the carbon particles is between about 1 minute and about 2 days.

10   46.   The method of claim 45, wherein the time between administering and detecting the carbon particles is between about 5 minutes and about 60 minutes.

47.   The method of claim 1, wherein the subject is a human.

15   48.   The method of claim 1, wherein tissue sample is removed by a lymphadenectomy.

49.   The method of claim 1, wherein a lymph node is further identified by using a hematoxylin-eosin histopathological technique, an immunohistochemical technique, spectroscopy or a cancer staging technique.

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50.   The method of claim 1, further comprising a microscopic examination of the lymph node.
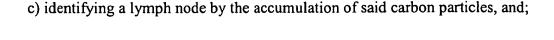
51.   The method of claim 1, wherein the identifying a lymph node identifies at least one sentinel lymph node.

52.   The method of claim 51, wherein the identifying a sentinel lymph node further comprises histopathology.

53.   The method of claim 52, wherein the histopathology further comprises assessment of carbon particle accumulation in a subregion of the sentinel lymph node.

54.   The method of claim 52, wherein the histopathology further comprises identification, diagnosing, staging, or predicting the presence of neoplastic tissue in the sentinel lymph node.

55.   The method of claim 51, wherein a subject who have evidence of micrometastasis in the sentinel node undergo a subsequent lymphadenectomy.

56.   A method of identifying a disease-associated lymph node in an excised tissue sample, comprising,

a) administrating to a subject at least one fluid composition comprising of from about 0.1% carbon particles to about 6.0% carbon particles and isosulfan blue,

b) excising at least one tissue sample suspected of comprising at least one lymph node,

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c) identifying a lymph node by the accumulation of said carbon particles, and;

d) identifying, diagnosing, staging or predicting the presence of neoplastic tissue

5   in said lymph node.

57.   A method of identifying a disease-associated lymph node in an excised tissue

sample, comprising,

10   a) administrating to a subject at least one fluid composition comprising of from

about 0.1% carbon particles to about 6.0% carbon particles and Patent blue V,

b) excising at least one tissue sample suspected of comprising at least one lymph

node,

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c) identifying a lymph node by the accumulation of said carbon particles, and;

d) identifying, diagnosing, staging or predicting the presence of neoplastic tissue
in said lymph node.